

## What Is PCC+?

PCC+ (PCC Plus) is essentially a connection between the RPMS database and Microsoft Word® that can yield a variety of real-time documents, including:

- Customized encounter forms
- Health summaries
- Patient education materials
- Claims forms
- Outguides
- Management reports
- Order entry forms

The primary use of this application so far is improving quality of health care as well as data and billing integrity through combining the best features of the PCC encounter form, superbill and health summary in one integrated document.

PCC+ is unique in a variety of ways and will take the *combined* efforts of different segments of facility staff, from IT to medical records to clinicians, to utilize it to its fullest potential. Some business processes will need to be changed at the participating sites. PCC data will need to be evaluated for quality and changed as needed. Performance metrics will need to be identified to track improvement. Clinicians and others will need to work together to evaluate and possibly redesign templates to satisfy both clinical and business office needs.

## Key Points About PCC+

- Operates “on top of” native PCC with NO changes to the PCC code. Integrates clinical and billing functions into one form.
- Requires multi-departmental collaboration for successful implementation.
- Provides two levels of customization:
  - Form type, e.g. Diabetes, Ambulatory, Dental, etc.
  - Site-specific, based on the individual characteristics of the clinic, provider, and patients.

- Generates the form in real time on a laser printer.
- Built-in clinical protocols can standardize care. Takes advantage of new technology, e.g., Windows/GUI, Word, Laser Printer, Internet. Includes variety of form templates (e.g. Ambulatory, Well Child, Podiatry), for site use or customization

Sites using PCC+ have demonstrated:

- Increased data entry quality and productivity, due to better completeness and legibility.
- Improved coding and problem documentation.
- Enhanced charge capture.
- Improved Problem List maintenance and POV documentation.

## How Does PCC+ Work?

The most common use for PCC+ has been to build a customized encounter form in real time for each patient visit. These documents are generated locally on a laser printer before each clinic visit, fully replacing their traditional PCC counterparts.

The basic functionality of PCC+ is to provide a link between the PCC database and Microsoft Word®. This is accomplished through the Mail Merge feature. A mail merge field is linked to a particular location in the database.

From a technical perspective, most of the actual computing is done *outside* of the traditional M/PCC environment by background processes in both the M and Windows environment.

The process of generating an encounter form or health summary has four stages:

1. Patient check-in.
2. PCC data mining (patient info from PCC, provider ICD preferences, and site orderables)
3. Data file transmission to the Print Server
4. Document generation (mail merge and print)

## Current Application Status

PCC+ v. 2.2 was released February 2004. PCC+ was originally certified as an RPMS application in June 2001. ITSC began implementing IHS-wide deployment activities in July 2001.

Enhancements include:

- Well Child form with precision content determined by a built-in, editable knowledge base replaces the entire set of pre-printed Well Child forms currently in use. Includes growth grids; “reminder tables” for immunization forecasting, immunization history, development milestones, nutritional counseling topics, and parent education.
- Advanced System Management Utility (ASMU) that improves PCC+ reliability and maintenance.
- PCC+ Print Service is faster, more robust, and capable of presenting PCC data in new objects within Word documents; e.g., graphs and self-sizing tables.

## Steps for Successful Site Implementation

ITSC’s recommended implementation plan for interested sites includes:

- Create multi-disciplinary Site Implementation Team
  - clinicians (preferably at least one physician and one nurse),
  - registration and data entry,
  - administration and billing,
  - medical records, and
  - technical site manager/other IT staff.
- Attend Area-sponsored 1-day Orientation
- Complete site evaluation survey
- Order and install hardware
- Schedule a pre-implementation site visit (1-1/2 days)
- Follow-up Team activities, including: workflow redesign; data review; space planning; baseline metrics; template review.
- Implement one form in one clinic
- Implement additional forms and additional clinics

## HW/SW Requirements Summary

A detailed System Requirements document can be downloaded from the PCC+ web site.

[www.ihs.gov/CIO/pccplus](http://www.ihs.gov/CIO/pccplus)

- **Kernel**, version 8, patch 4 or later
- **FileMan**, version 21 or 22
- **MSM**, version 4.4.1
- **Mandatory RPMS packages:**
  - Health Summary-APCH V2.0 patch 07
  - PCC Data Entry - APCD V2.0 patch 07
  - IHS Utilities – XB/ZIB V3.0 patch 08
- **Recommended RPMS packages:**
  - Women's Health BW V2.0 patch 07
  - Immunization - BI V7.0
  - Medical Administration Service - MAS V5.0 patch 07 (Scheduling is part of MAS)
- **Print Server(s)**
  - INTEL PIII 733 MHZ Processor, 10/100 Smart NIC, 128MB-100MHZ SDRAM, 10+ GB Hard Drive
  - Windows OS
  - Windows 2000 PRO
  - MS Office 2000 SBE
- **Network**
  - 10 MB LAN minimum, 100 MB recommended
  - WAN connectivity: provide FTP and Telnet access to local RPMS server and print server within IHS Firewall
- **Printer(s)**
  - HP 1000-5000 series with minimum 5 MB onboard RAM
  - Single side or Duplex
  - NIC card preferred over shared printer

## PCC+ Project Team

*ITSC Project Officer:* Arthur Gonzales

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*Originating Developer:* Greg Shorr, MD

*Technical Support Team:* ITSC Support Center staff; Kevin Cole, Consultant; Lucas Covington, ITSC

*Implementation Team:* Peter Burton, ITSC; David R. Taylor, RN, RPh, PA-C, MHS, CPHQ, Cherokee Indian Hospital

## Does Your Site Need PCC+?

Your site may want to consider implementing PCC+ if one or more of the following conditions are met.

- Large percentage of third-party billing
- No existing Superbill
- Data entry backlog
- Need for improved clinical results for GPRA and other indicators



# PCC+ (Plus) Customizable Encounter Form v. 2.2 (February 2004)

[www.ihs.gov/CIO/pccplus](http://www.ihs.gov/CIO/pccplus)

For detailed information about the PCC+ application, system requirements, implementation schedules and training services provided by IHS Information Technology Support Center (ITSC)

